

Application No. 10/723,462
Amendment dated June 10, 2005
Reply to Office Action of March 10, 2005

REMARKS/ARGUMENTS

In response to the pending Office Action of March 10, 2005, Applicants present the following arguments and amendments. The present amendments are requested solely for the purpose of more clearly describing and claiming the present invention and do not introduce any new matter. Applicants submit that in light of the arguments presented and amendments requested this application is in condition for allowance. Accordingly, entry of these amendments, reconsideration of all pending rejections and objections, and passage to allowance is respectfully requested. With this response claims 1 – 60 are pending herein.

Amendments to the Specification

Amendment of the specification is requested to correctly identify the relevant source of United States government support. No new matter is added.

Amendments to the Claims

Amendment of claims 45 and 47 is requested to clarify and improve antecedent basis. Support for the requested amendments is provided by the description of a shielded inductive detector beginning on page 53, line 9 and ending on page 54, line 9, and by Figure 10. Amended claims 45 and 47 do not introduce any new matter.

New claims 53 – 60 have been added to more particularly point out and distinctly claim the present invention. New claims 53 - 60 do not introduce any new matter.

Support for new claim 53 is provided by the description on page 54, lines 21-22 setting forth exemplary shapes of the shielding body. New claim 53 does not add any new matter.

Application No. 10/723,462
Amendment dated June 10, 2005
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Support for new claim 54 is provided by the description on page 54, lines 12 – 15, which describes an exemplary device configuration wherein the sensing electrode is surrounded on all sides by the shielding element. New claim 54 does not add any new matter.

Support for new claim 55 is provided by the description on page 54, lines 6 - 10, which describes an exemplary device configuration wherein first and second shielding grids are positioned to extend across the entire ends of the shielding body. New claim 55 does not add any new matter.

Support for new claim 56 is provided by the description beginning on page 54, line 30 and ending on page 55, line 1, which describes an exemplary device configuration wherein first and second shielding grids have a position along the charge detection axis that is selectively adjustable. New claim 56 does not add any new matter.

Support for new claim 57 is provided by the description on page 55, lines 2 - 4, which describes an exemplary device configuration wherein first and second shielding grids have transmissions of incident ions greater than 80%. New claim 57 does not add any new matter.

Support for new claim 58 is provided by the description on page 55, lines 5 - 11, which describes exemplary first and second shielding grids useful in the present invention including screens, plates and lattices. New claim 58 does not add any new matter.

Support for new claim 59 is provided by the description on page 55, lines 13 - 28, which describes an exemplary device configuration wherein the shield

Application No. 10/723,462
Amendment dated June 10, 2005
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element is held at an electric potential close to ground. New claim 59 does not add any new matter.

Support for new claim 60 is provided by Example 3 and the time-of-flight data presented in Figures 11A-C, which describe use of shielded inductive detectors of the present invention for time-of-flight analysis. New claim 60 does not add any new matter.

Election Requirement

In the Office Action of March 10, 2005, the Examiner required restriction to one of two groups of claims: (I) Claims 1 – 44, drawn to a mass analyzer and (II) Claims 45 – 52, drawn to an inductive detector. In support of the restriction requirement, the Examiner characterized the inventions defined in claims 1-44 and claims 45-52 as related as combination and subcombination and asserted:

In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because an unshielded inductive detector or different detection configuration can be used. The subcombination has separate utility such as a photoelectric detector, eddy-current detector or other phenomena

Applicants respectfully disagree with the Examining Attorney's characterization of the claims of the present application, and requests reconsideration and withdrawal of the pending election requirement in light of the following arguments. Pursuant to the requirements of 37 C.F.R. § 1.143, however, Applicants hereby provisionally elect the invention described as Group II (claims 45-52).

Applicants also request that the Examiner consider new claims 53 – 60 as within the scope of the invention described as Group II, as these claims directly depend from the claims of Group II and are also drawn to shielded inductive

Application No. 10/723,462
Amendment dated June 10, 2005
Reply to Office Action of March 10, 2005

detectors. Thus, Applicants respectfully request examination of claims 53-50 in addition to those of the provisionally elected Group II.

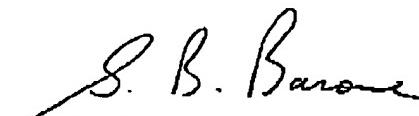
The claims of Groups I and II involve an important technical feature in common, as both groups relate to inductive detection of electrically charged particles. Applicants argue that the existence of this common technical feature renders the subject matter of Groups I and II close enough so as not to impose a significant burden by searching and examining the allegedly distinct inventions. Similar prior art would need to be compiled and analyzed for an evaluation of the patentability of the claims of both Group I and Group II. Accordingly, Applicants respectfully request reconsideration and withdrawal of the Examiner's election requirement.

CONCLUSION

In view of the foregoing, this case is considered to be in condition for allowance and passage to issuance is respectfully requested. If there are any outstanding issues related to restriction or patentability, the courtesy of a telephone call is requested, and the Examiner is invited to call to arrange a mutually convenient time.

It is believed that excess claims fees in the amount of \$200.00 for the addition of eight new claims is required. Therefore, please deduct this amount from Deposit Account No. 07-1969. If any additional fees are required, however, please also deduct all additional fees for this submission and any extension of time required from Deposit Account No. 07-1969.

Respectfully submitted,



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Application No. 10/723,462
Amendment dated June 10, 2005
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